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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,672	05/21/2004	James W. Adkisson	BUR920040002US1	3671

23550 7590 03/28/2008

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EXAMINER	
MERANT, GUERRIER	
ART UNIT	PAPER NUMBER
2117	

NOTIFICATION DATE	DELIVERY MODE
03/28/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOCommunications@hwdpatents.com

Office Action Summary	Application No.	Applicant(s)	
	10/709,672	ADKISSON ET AL.	
	Examiner	Art Unit	
	Guerrier Merant	2117	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 December 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's arguments filed 12/06/07, with respect to the rejection(s) of claim(s) 1-20 under 35 U.S.C. 103 (a) rejections have been fully considered and are persuasive. The prior arts of record fail to explicitly teach inputting suspected faulty device features and comparing suspected faulty device features with previously studied features. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of **Shimono (US 6,308,293 B1)**.

Shimono teaches a fault diagnosis comprising teach inputting suspected faulty device features and comparing suspected faulty device features with previously studied features (e.g. col. 12, lines 38-65). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to implement the teaching presented in the prior arts with the one taught by **Shimono** in order to locate and identify faults.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 1 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As per claim 1, the specification (see [0022]) describes the system as software per se, which is a non-statutory subject matter.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Morioka et al. (US 6,611,728)** in view of **Shimono.**

Claims 1, 9, 10,15 and 18-20: **Morioka et al** substantially teaches a defect table *(e.g. item 111, fig. 1)* that associates previously studied features with known failures (e.g. col. 8, lines 36-62); and a fault isolation system that compares faulty device features with the previously studied features listed in the defect table in order to identify causes of the fail (e.g. col. 9, lines 9-30 & col. 11, lines 17-34). But **Morioka et al** fails to explicitly teach inputting suspected faulty device features and comparing suspected faulty device features with previously studied features. However, **Shimono** teaches a fault diagnosis comprising teach inputting suspected faulty device features and comparing suspected faulty device features with previously studied features (e.g. col. 12, lines 38-65). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to implement the teaching presented in the prior arts with the one taught by **Shimono** in order to locate and identify faults.

2. Claims 2-4, 6, 8, 11-13 and 17: **Morioka et al** and **Shimono** teach a diagnosis system as in claims 1, 9, and 15 above, wherein the previously studied features are selected from the group consisting of: net names, instance names, cell names, physical attributes, logical attributes, presence of a feature, and absence of a feature (col.20, lines 45-67 & col. 11, lines 14-34; **Morioka et al.**).

3. Claim 5: **Morioka et al** and **Shimono** teach a diagnosis system as in claim 1 above, wherein the simulation program utilizes device logic and operational logs to identify faulty device features *(e.g. col. 14, lines 20-31-* **Shimono***)*.

4. Claims 7, 14, and 16: **Morioka et al** and **Shimono** teach a diagnosis system as in claims 1, 9, and 15 above, further comprising a table update system for maintaining and updating the defect table (col. 23, lines 15-26, Fig. 30; **Morioka et al.**).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Exr. Merant Guerrier whose telephone number is (571) 270-1066. The examiner can normally be reached Monday through Thursday from 10: 30 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis Jacques, can be reached on (571) 272-6962. Draft or Informal faxes, which will not be entered in the application, may be submitted directly to the examiner at (571) 270-2066.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Guerrier Merant
03/14/08

/JACQUES H LOUIS-JACQUES/

Supervisory Patent Examiner, Art Unit 2117